

SEATTLE PUBLIC UTILITIES
RESOURCES PLANNING DIVISION
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F A X C O V E R S H E E T

DATE: January 27, 1998 TIME: 9:35 AM
TO: Ann Wessel PHONE: 360-407-6000
Water Quality Program FAX: 360-407-6426
FROM: Robert D. Chandler, Ph.D. PHONE: (206) 684-7597
Senior Environmental Analyst FAX: (206) 386-9147

RE: ADDENDUM TO SEATTLE'S NPDES ANNUAL REPORT

Number of pages including cover sheet: 7

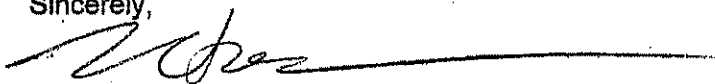
Message

Dear Ann:

Addendum to Second Year Report for Municipal Stormwater Permit No. WASM23003 is attached. Hard copy was posted today from Seattle.

If you have any questions, please contact me at 206-684-7597.

Sincerely,



Robert Chandler



Norman B. Rice, Mayor

Seattle Public Utilities

Diana Gale, Director

January 27, 1998

VIA FACSIMILE AND U.S. MAIL

Megan White, Program Manager
Water Quality Program
Washington State Department of Ecology
P.O. Box 47600
Olympia, Washington 98504-7600

Re: Addendum to Second Year Report under Municipal Stormwater Permit No. WASM23003

Dear Ms. White:

This report contains additional information as requested per Ecology's letter dated December 17, 1997, and is submitted as an addendum to the City of Seattle's Second Year report, which was provided to Ecology on September 3, 1997. Both reports are submitted by the City of Seattle pursuant to Special Condition S10 of the National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for discharges from municipal separate storm sewers for the Cedar/Green Water Quality Management Area. The reports cover the 12-month period between January 1, 1996, and December 31, 1996, with updates as appropriate through approximately June of 1997.

1. Status of Implementing Components of the Stormwater Management Program

The following programs have been implemented and are proceeding in accordance with the City's Stormwater Management Program (SWMP), as approved by Ecology on July 24, 1997.

a. Comprehensive Planning Process (S7.B.1 of the NPDES Permit):

A comprehensive planning process for the City's stormwater management programs has been implemented per Section 10.1 of the SWMP. Development of a successor organization to the Drainage and Wastewater Citizens Advisory Committee is in progress following the reorganization of Seattle Public Utilities in 1997.

b. Stormwater Management Program Priorities (S7.B.2 of the NPDES Permit):

A system for evaluating and prioritizing needs has been implemented. Details are contained in Chapters Three through Eight of the SWMP. Examining unmet needs and developing actions to address them are ongoing activities.

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c. Legal Authority (S7.B.3 of the NPDES Permit):

Adequate legal authority to control discharges to and from Seattle's storm drainage systems has been established and is described in Appendices R-0 and R-1 of the SWMP.

d. Monitoring Program (S7.B.4 of the NPDES Permit):

The City's Monitoring Program has been implemented per Appendix WQ-1. Ongoing monitoring programs in Seattle's receiving water bodies are being conducted as scheduled (see Table MP 1.1 of SWMP). Mapping of the City's creek systems conducted as part of the Habitat Assessment program (MP 2.6 of SWMP) has been essentially completed, and detailed habitat surveys have been conducted on five of the Seattle's larger creek systems (Longfellow, Pipers, Thornton, Schmitz, and Taylor Creeks). The City's Aquatic Community Assessment program (MP 2.7 of SWMP) was expanded in 1996 to include sites in Longfellow, Pipers and Venema Creeks, and an additional site was added for Thornton Creek. Funding for the Thornton Creek Watershed Action Plan (MP 5.1.2), in the form of a loan from Ecology, was approved in June 1997. Construction of the oil/grit separator to treat highway runoff entering the Thornton Creek system (MP 5.1.7) is expected to be completed in 1998. Construction of the WSDOT-sponsored best management practice (BMP) research site (MP 5.1.8) has been delayed until additional funding sources can be identified.

e. Information Support Program (S7.B.6 of the NPDES Permit):

The City's Information Support program has been implemented per Section 10.6 of the SWMP. Baseline efforts establishing a geographical information system (GIS) database of outfalls, drainage systems, tributary conveyances and existing land uses are essentially complete. The City's is committed to maintaining and updating its GIS system throughout the term of the permit and beyond. The City continues to maintain its system of 17 rain gauges and retains all records associated with precipitation, water quality, water quantity, and structural BMPs as required by the permit.

f. Runoff Control from New Development (S7.B.8.a of the NPDES Permit):

The City's regulatory programs to control runoff from new development and redevelopment, as described in Appendices R-0 and R-1, have been implemented. Development of the City's Stormwater Management Manual (Appendix R-2) is continuing, with a Directors' Rule on Infiltration drafted and several issues related to equivalency to Ecology's Manual examined in-house during 1996. Additional work on the SWMM was placed on hold during early 1997 in anticipation of a new Ecology Manual being developed and owing to staff resources being focused on final SWMP approval.

g. Treatment and Source Control Measures (S7.B.8.b of the NPDES Permit):

Treatment and source control measures have been implemented per WQ-3 of the SWMP. The initial cycle of business inspections and education under the Lake Union Source Control Program (WQ-4) and Elliott Bay/Duwamish River Source Control Project (WQ-5) have been completed.

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Follow-on business education and inspection programs for these drainage basins are being evaluated.

h. Operations and Maintenance of Stormwater Facilities (S7.B.8.c of the NPDES Permit):

A drainage maintenance program has been implemented, as described in Appendices OM-1 through OM-6 of the SWMP. As part of the reorganization of several Seattle departments, SPU Drainage and Wastewater Operations Division is now responsible for drainage system maintenance for culverts, pipes, inlets, catchbasins, sand boxes, trash racks, and ditches (mowing and clearing debris).

i. Operations and Maintenance of Roadways (S7.B.8.d of the NPDES Permit):

A roadway maintenance program has been implemented, as described in Appendix OM-2. As part of the reorganization of several Seattle departments, Seattle Transportation Department (SEATRANS) has been assigned responsibility roadway surface improvement and maintenance, including settled pavement, shoulder grading, shoulder erosion, pot holes, pavement cracks, pavement overlay/seal coats, sidewalks, curbs, gutters, and mowing rights-of-way. In March, 1997, a memorandum of understanding was executed between SPU and SEATRANS specifying administrative procedures and monetary reimbursements for support services received from SEATRANS related to drainage and wastewater system operations and maintenance.

j. Water Quality Considerations in CIPs (S7.B.8.e of the NPDES Permit):

A program to include water quality management considerations into flood management projects has been implemented as described in Section 10.12 of the SWMP. Projects described in Section 9.6 of the SWMP remain active during 1996. Two drainage-related projects have been added since final SWMP approval in 1997. The first is the Thornton Creek Watershed Action Plan (\$400,000), which is expected to take three years to complete, beginning in 1997. The second, the Thornton Creek Protection BMP project (\$192,000), will install a structural BMP to treat highway runoff from Interstate Highway 5 before it enters the Thornton Creek System. Construction is estimated to be completed in mid-1998. One CIP, inadvertently omitted from the SWMP but meriting comment, is the South Norfolk Drainage Project. Essentially completed in early 1997, this \$3.2 million project involved the construction of wet ponds, vegetated channels, and wetlands to treat runoff from a highly urbanized area near Boeing Field south of downtown Seattle.

k. Reduction of Pesticides, Herbicides, and Fertilizers (S7.B.8.f of the NPDES Permit):

Programs to reduce pollutants associated with the application of pesticides, herbicides and fertilizer discharging into the City's storm sewers have been implemented (See Appendices TC-2 and TC-4 of SWMP). During 1996, the Green Gardening Program, funded by the Local Hazardous Waste Management Program, presented an Integrated Pest Management workshop to 160 professional grounds managers representing 82 public agencies and private businesses. In addition, 1570 people attended the Green Gardening Tours of 14 gardens in late June, and the event was featured in a front page article in the Home Section of the *Seattle Times* on June 16. Ten new articles on alternative pest management techniques were written for the "Practical

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Gardener" column of the Sunday *Seattle Times*. During 1996, there were 213 people who attended the Green Gardening workshops for professionals and over 29,000 Green Gardening brochures were distributed.

l. Illicit Discharges (S7.B.8.g of the NPDES permit)

Programs to detect, remove and prevent illicit discharges and improper disposal have been implemented through various source control programs (WQ-2, WQ-3, WQ-4, WQ-5 of SWMP), monitoring programs (WQ-1 of SWMP), and regulatory programs (R-0 of SWMP). The City's Water Quality Complaint phone number was changed as part of the reorganization of SPU and now calls related to water quality, illegal dumping, solid waste, and graffiti, are all made to the same number (206-684-7587). This information was provided to the citizens of Seattle in the fall publication of SPU's *Curb Waste Times*, which was received by over 200,000 households.

m. Control of Industrial Discharges into MS4s (S.B.8.h of the NPDES Permit):

Programs to reduce pollutants in stormwater discharges from industrial facilities have been implemented. See the City of Seattle's Second Year report submitted to Ecology on September 3, 1997.

n. Public Education Programs (Section S7.B.8.i of the NPDES Permit):

Public education programs have been implemented. See City of Seattle's Second Year report submitted to Ecology on September 3, 1997.

2. Changes in Permit Coverage Area:

See City of Seattle's Second Year report submitted to Ecology on September 3, 1997.

3. Expenditures for Components of Stormwater Management Program (S7.B.5):

See City of Seattle's Second Year report submitted to Ecology on September 3, 1997.

4. Compliance Activities

a. Enforcement Actions:

The City's Inspection Services Division (ISD) of the Department of Construction and Land Use (DCLU) inspects and enforces the Erosion and Sedimentation Control (ESC) and best management practice (BMP) requirements of private development construction projects. ISD has nine regular building inspectors whose duties include ESC/BMP construction inspection. Additionally, there is one inspector assigned specifically to inspect construction projects in Environmentally Critical Areas (ECA).

The nine regular building inspectors are divided into North and South teams. Each team has a supervisor whose duties include facilitating field problem resolution. There are two structural building inspectors who may also become involved in particularly sensitive ESC/BMP problems and complaints. Contractors of all projects in ECA sites, and contractors of many projects in

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non-ECA sites, are required to hold a pre-construction conference with the DCLU inspector. The project's ESC/BMP plans are discussed in the pre-construction conference.

DCLU issues permits under five project categories. Category 1 and Category 2 permits include almost all single family residences and duplexes, some additions and alterations, and many new commercial buildings. Category 3 permits include all of the above noted project types, but also require a grading permit due to additional cut and fill. Category 4 includes projects over 9000 square feet of developmental area. Category 5 permits are those projects that meet all the requirements for Category 4, but which also require a separate NPDES construction activities permit from Ecology. The details required in BMP planning for projects vary by the project category. A one-page Construction BMP Checklist is required for Categories 1 and 2. Category 3 requires more specific BMP details by applicants as part of the site or grading plan, and Category 4 projects require a separate detailed BMP plan prepared by a civil engineer. Permitting and inspections for Category 5 projects are the responsibility of Ecology. Typically, a DCLU inspector will conduct an ESC/BMP inspection in conjunction with the foundation inspection, and inspectors only enforce ESC/BMP details that are included in the approved project plans. Because Category 1 and 2 projects involve checklists rather than specific BMP plans, on site inspections of ESC/BMPs at these sites usually occur only in response to a complaint.

DCLU requires applicants to contract with a geotechnical engineer for ESC/BMP Special Inspection if the project includes construction in an ECA Geologic Hazard Area. The geotechnical engineer is required to submit daily reports to DCLU during ESC/BMP component construction and to include the status of the ESC/BMP components in all subsequent reports throughout the project. Grading in Geologic Hazard ECA sites is limited to a period from May through October unless otherwise approved by DCLU's Geotechnical Engineer.

b. Investigations:

SPU water quality investigators responded to 142 surface water quality complaints in 1996 and 98 complaints were received between January 1 and June 30, 1997. Of the 98 complaints SPU water quality investigators responded to in the first half of 1997, nine were subsequently referred to other municipal organizations in Seattle. These referrals include four cases related to sanitary or combined systems, which were referred to either Street Use and Enforcement Division of SEATRANS or Drainage and Wastewater Operations Division of SPU for action. Two other cases involved abandoned vehicles (referred to Seattle Police Department) and three cases were related to erosion from construction activities (resolved by DCLU). The remaining five complaints were referred to either King County Hazardous Waste (4 cases) or Puget Sound Air Pollution Control Authority (1 case) for resolution. Additional information is provided in the City of Seattle's Second Year report submitted to Ecology on September 3, 1997.

5. Known Changes in Water Quality

See City of Seattle's Second Year report submitted to Ecology on September 3, 1997.

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6. Status of Watershed-wide Coordination and Activities (S7.B.7):

Mechanisms for watershed-wide coordination of stormwater management activities have been implemented. See City of Seattle's Second Year report submitted to Ecology on September 3, 1997.

If you have any questions concerning this report or pertaining to the City of Seattle's Stormwater Management Program, please contact Robert D. Chandler by phone at 206-684-7597 or by e-mail at robert.chandler@ci.seattle.wa.us.

Sincerely,



Tim Croll¹, Director
Resource Management Division

TC/RDC:rdc

cc: Ann Wessel, Washington State Department of Ecology
Krista Matthiesen, King County Department of Natural Resources
Robert Chandler, Seattle Public Utilities
Cheryl Paston, Seattle Public Utilities
Neil Thibert, Seattle Public Utilities
Theresa Wagner, Seattle City Attorney's Office

¹ I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations.